



Vol. 2—No. 11

DECEMBER 1959

De Beers Develops Man-Made Diamonds

THE GENERAL ELECTRIC COMPANY faces a new rival in the manufacture of synthetic diamonds. The competitor is the De Beers diamond trust, which recently announced their development of man-made industrial diamonds. They are of the same type as those manufactured by General Electric, Mr. Harry Oppenheimer, chairman of De Beers Consolidated Mines Ltd., announced in Johannesburg.

Mr. Oppenheimer said on November 17: "A certain amount of information has been released in the last few days by the General Electric Company in regard to their process, but we are not in possession of sufficient details of that process to be sure whether it is the same as ours, or whether a new approach to the problem has been found. The diamonds which have been made in our laboratory consist in effect of an abrasive grit suitable for use in resinoid bonded grinding wheels. It is only in this field that synthetic diamonds have so far been able to compete.

"The Adamant Laboratory (a De Beers institution) has not been able to manufacture other types of industrial diamonds and there is no question of the manufacture of gem diamonds. Some of the diamonds that we have made have been bonded in grinding wheels and tests of their grinding efficiency are now being carried out." He said the whole manufacturing process is still in the laboratory stage, "but we are confident it would be technically and economically possible for us to proceed to manufacture on a commercial scale if we found it desirable to do so."

Any decision to enter the synthetic production of industrial diamonds would be taken in close cooperation with the Belgian Congo diamond mining company, from whose Beceka Mine comes the great majority of the world's supply of the natural diamond with which the new synthetic material is in competition, as well as other qualities of industrial diamonds for which synthetic diamonds provide no substitute.

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Desert diamond field: In mining for diamonds (natural ones!) in South West Africa, vast quantities of sand must be removed to reach the diamondiferous gravels of the old marine beaches, some of them as much as seventy feet below the present desert surface.



Personal

MONTGOMERY PAYS A VISIT

FIELD-MARSHAL VISCOUNT MONTGOMERY arrived in Johannesburg on November 19 and was given an enthusiastic welcome as he stepped from the aircraft at Jan Smuts Airport. He began a two weeks' personal and private tour of the Union. He said he was deeply interested in developments in Africa and Asia and anxious to get the fullest information on those areas. He was introduced to the press by an old friend, Major General Sir Francis de Guingand, his former chief of staff in North Africa, with whom he stayed in Johannesburg. He said that he had heard of the tremendous changes and progress that had occurred in South Africa since his last visit twelve years ago and that he was looking forward very much to seeing these for himself.

SCIENCE LEADER IN U.S.

PROFESSOR A. L. HALES, Director of the Bernard Price Institute of Geophysical Research at the University of the Witwatersrand, has accepted an invitation to be the guest of the Carnegie Institute of Washington and the American National Science Foundation. He has already left for the United States where he will spend fourteen months visiting several international geophysical centers. In March he will fly to London as the guest of the Royal Society where he will lecture on the current research program of the Bernard Price Institute. Later he will fly to Helsinki from America to attend the assembly of the International Geodetic and Geophysical Union.

BROADCAST CHIEF AIDS GHANA

The Director General of the South African Broadcasting Corporation, MR. GIDEON ROOS, recently spent three weeks in Ghana. He was loaned by the South African Government to advise Ghana on legislation being drawn up to control broadcasting in that country.

GRANT FOR BOTANIST

DR. A. JOFFE of the University of Pretoria has received a grant of about £1250 from the Rockefeller Foundation. The grant will enable Dr. Joffe, a plant physiologist, to attend a Montreal botanical conference and visit plant physiology research centers in Canada, the United States and Europe.

SECRETARY OF LONDON ORCHESTRA

MR. ERNEST FLEISCHMANN, of Cape Town, has been appointed secretary of the London Symphony Orchestra. He took over his new post on November 16. Mr. Fleischmann, who is thirty-four, was Music Organiser of the Van Riebeeck Festival of 1952, and also Director of Music and Drama of the Johannesburg Festival in 1956.

Mr. Macmillan to Visit Union

THE BRITISH PRIME MINISTER and Lady Dorothy Macmillan will visit the Union during the last week of January, 1960, as the guests of the South African Government.

Commenting on the visit, Dr. Verwoerd, Prime Minister of the Union, said: "Shortly after becoming Prime Minister, I indicated that a visit by the Prime Minister of Great Britain would be welcomed by the Union. It would create the opportunity for personal top level discussions of problems and future developments which affect both countries. There would be more time for this in South Africa than a British Prime Minister could be expected to make available in his own country. In addition, such a visit and the opportunity of gaining first-hand information would provide a useful background for discussions of this nature.



"In view of the fact that Mr. Macmillan could only leave England next January and that he naturally wished to include certain other countries of Africa in his itinerary, I suggested on behalf of the Government that he should visit the Union at the end of his tour. This would provide a suitable culmination for his African journey in view of the high degree of development which the Union has already attained in all spheres.

REPUBLIC

"The fact that a Government committed to the earliest possible establishment of a republic has issued this invitation to the British Prime Minister and will act as his host, is the best proof that it is its policy to maintain and promote friendship and cooperation with Great Britain, whatever the constitutional position. It will also be the first time in the history of the Union that a British Prime Minister will visit South Africa as Head of the Government, which again is clear proof of Great Britain's desire for the maintenance of mutually good relations."

Mr. Louw to Visit Ghana

MR. ERIC H. LOUW, Minister of External Affairs, has announced that he intends to visit Ghana next August, at the invitation of Dr. Kwame Nkrumah, the Prime Minister. He will make a special visit to Accra for that purpose. The invitation was extended through Mr. Ako-Adjei, Foreign Minister and leader of the Ghana delegation to the United Nations General Assembly in New York.

NEW ISRAELI MINISTER

COLONEL KATRILE SALMON, Israel's new Minister to South Africa, has arrived in Johannesburg with Mrs. Salmon. Colonel Salmon who served with the British Forces during the last war and subsequently with the Israeli Army, has an economic background as well. He has been both Military Attaché in Washington and Adviser to the Israeli Minister of Finance.



An informal photo of Dr. and Mrs. Jansen and their son.

Governor-General Dies at 78

DR. ERNEST GEORGE JANSEN, Governor-General of the Union of South Africa, died in Pretoria on Wednesday, November 25th. Until the new Governor-General, Mr. C. R. Swart is sworn in, the Chief Justice of the Union, Mr. L. C. Steyn, will be the Officer Administering the Government.

Messages of condolence were sent by the Queen and the Prime Ministers of several countries. In New York at the United Nations, the Main Political Committee of the General Assembly observed a minute's silence.

The Queen sent two cables. Her message to Mrs. Jansen said: "I offer to you and to your son my heartfelt sympathy in the bereavement you have suffered by the death of your husband. I have always greatly valued his services as Governor-General of the Union and as my personal representative." She also sent a message to the Government.

After recovering from a long illness, Dr. Jansen contracted pneumonia during the week-end preceding his death. He is survived by his wife and their only son, Mr. Justice Ernest L. Jansen, a member of the Transvaal Supreme Court.

Dr. Jansen was buried on November 30th from the Groote Kerk in Pretoria, in the Heroes Acre which was recently presented to the Government by the City Council of Pretoria. (The late Prime Minister, Mr. Strijdom, is also buried in this plot.)

Full and Active Life

Dr. E. G. Jansen led a full and active life in the service of his country. He was an advocate, politician, editor, Cabinet Minister, Speaker of the House of Assembly and Governor-General.

In every capacity he earned distinction and the admiration of his fellow citizens, and left his mark on the South African scene.

XHOSAS ARE MOURNING

A DELEGATION of four Xhosa chiefs went to Pretoria on November 26th to express their condolences on the death of Dr. Jansen. Their message read: "We are expressing our deepest regret at the passing of our father, His Excellency the Governor-General. South Africa has suffered an irreparable loss. The Xhosa people of South Africa are mourning today. We pray that God will help the bereaved family."

Before assuming his high office in January, 1951, Dr. Jansen had already won unstinted praise and recognition among the legislatures of the Commonwealth as one of the most gifted, fair and just Speakers who ever graced a chair in any Parliament.

Dr. Ernest George Jansen, B.A., LL.B., LL.D. (Hon.) was born on 7th August, 1881, on his parent's farm in the Dundee district of Natal. He studied for his degrees at home, and was graduated at Witwatersrand University. He began his legal practice as attorney, and, as advocate in Pietermaritzburg in 1906, he was admitted to the Bar.

SPEAKER FOR 15 YEARS

In 1915 he entered political life and joined the National Party of which he was a foundation member in Natal. After a visit to Europe with the Independence Deputation in 1919, he stood for Parliament and won the Vryheid seat in 1921. He represented this constituency for 22 years in the House of Assembly. After the victory of the National-Labour Coalition under General J. B. M. Hertzog in 1924, he was elected Speaker.

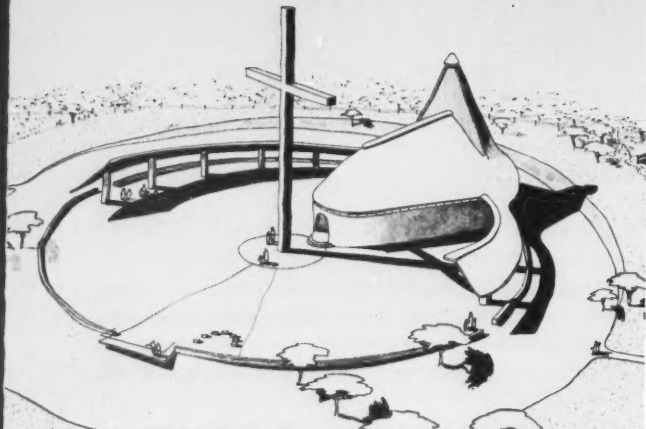
In 1929 he entered the Cabinet as Minister of Native Affairs but was elected Speaker again from 1933 to 1943. In the General Election of that year he lost his seat at Vryheid but was later returned for Wolmaransstad in the Transvaal on the death of General Jan Kemp. When the Malan Government came to power in 1948, he again became Minister of Native Affairs until his resignation on his appointment as Governor-General in 1951.

Dr. and Mrs. Jansen paid several official visits to countries in Southern Africa and Europe.

Dr. Jansen always took a keen interest in the cultural life of the Union, and served for some years on the Council of Natal University. He was chairman of the Voortrekker Centenary Committee in 1938 and officiated in this capacity when the imposing memorial was inaugurated in Pretoria in 1949. He was also an original member of the South African Academy of Science and Art, founded in 1909, and chairman of the Central Monuments Commission.

As a journalist, he edited an English weekly Nationalist newspaper, "The New Era," and among other publications to his credit are "Die Voortrekkers in Natal," (The Voortrekkers in Natal) "Die Voortrekkertyd," (The Voortrekker Era) and many magazine articles on South African history.

Dr. Jansen was married to the former Miss M. M. Pellissier, a granddaughter of a French missionary. Mr. Justice Ernest L. Jansen is the only son of the Jansens.



This new church, dominated by an 80-foot high cross, is being built by the Dutch Reformed Church at Dingaanstat in Zululand. The church, to be given to the Zulu people, is being erected on the site of the 1838 massacre of the Voortrekkers by the Zulu king Dingaan. Nearby, a home for Zulu orphans and neglected children is also being built. Architects Le Roux and Malan have designed the church more in keeping with Zulu tradition than with accepted Western tradition, although the liturgical center is on Protestant lines.

SAVED FROM STARVATION

THE SOUTH WEST AFRICA ADMINISTRATION and the Union Department of Bantu Administration and Development recently made a successful effort to save 100,000 Ovambos from starvation, following a severe drought in the northern part of South West Africa.

Large quantities of maize were transported by rail to Grootfontein, from where these supplies were taken to Ondongua and various distribution centers.

The emergency called for extra teams of roadworkers to repair a forty-mile stretch of road which was in a poor condition. Officials worked round the clock to unload the buses as they arrived and to load the food on trucks for distribution throughout the afflicted areas.

Hundreds of Ovambos, mainly women, gathered at the distributing offices and also at Ondongua to await the arrival of the food supplies.



New Rain Queen Enthroned

THE FOURTH MODJADJI — the legendary Rain Queen of the Balobedu tribe—was installed recently before her chief counsellors, eleven visiting chiefs and thousands of tribesmen. The ceremony was performed by the Minister of Bantu Administration and Development, Mr. M. D. C. de Wet Nel.

From all parts of Lobeduland, men, women and children in colourful dress filled the steep roads that led to the royal rendezvous, the Kgoro, meeting place of the tribe where the grain is stored and the festival fires burn. The tribe's own fleet of buses brought many people from distant points to the festival.

Mr. Nel presented the new chieftainess with a ceremonial chair—a symbol of authority—and a staff of office, both carved with the wild boar totem of the Balobedu.

The new Modjadji, daughter of the late Modjadji III, kneeling on a leopard skin in front of her counsellors and members of the royal family, received a great ovation when she rose to occupy the chair.

Modjadji IV is chieftainess over 40,000 subjects, of whom 15,000 live in the immediate vicinity of the Kgoro. The Balobedu have already formed a Bantu Authority which will eventually be linked up with several others to form a regional authority.

(Legend has it that when the Rain Queen becomes too old, she takes poison; but Modjadji III became a Christian many years ago and abolished this pagan rite as well as that of putting to death all twins born to the tribe.)

ZULU AUTHORITY ESTABLISHED

THE ZULU NATION recently celebrated the establishment of their first Regional Authority under the Bantu Authorities Act which provides for the gradual attainment of self-government by the Bantu peoples of South Africa.

The festival, held near Eshowe, was attended by a vast crowd who came from all parts of Zululand. The Inkanyezi Regional Authority has thirty-three members representing thirteen Zulu tribes and has jurisdiction over 80,000 Zulus. The thirteen chiefs in the region elected Chief E. Ndwandwe as their chairman.

Chief Ndwandwe welcomed the event as a great day for the whole Zulu nation. "We have grown. When the son of a Zulu has grown up to be a young man, he leaves his father's kraal and receives his own kraal. The same thing is happening here today. We have been given the opportunity to govern ourselves. We have been given something we can use. But we still need advice and guidance and we ask the Government not to get tired of us, even tomorrow."

He added: "Our progress depends on education. We are going to build more schools."

BANTU PRESS FLOURISHES

SEVEN BANTU NEWSPAPERS and five Bantu periodicals are presently being published in South Africa, states an article in the *Bantu Education Journal*. The newspapers are either published weekly or bi-weekly, while the periodicals are published monthly.

Some newspapers and periodicals are published in English while others appear in the various vernaculars, or often in both. Weeklies such as *Imvo Sabatsundu*, *Ilanga Lase Natal*, *Um-Afrika* and the *Golden City Post* have a circulation ranging from 20,000 to 40,000; and monthlies such as *Zonk* and *Bona*, from 58,000 to 106,000.

While no daily Bantu newspaper is as yet published, the demand for it and other reading matter, will increase concurrently with the increase in literacy. In 1952, the Bantu literacy rate was 21.8 per cent. By the middle of 1958, it had risen to 35 per cent. Over 3,000,000 Bantu in the Union are now able to read.

About 1,500,000 Bantu children attend school, and there seems to be every prospect that the scale of literacy among the Bantu will rise to nearly 90 per cent with the new generation. By the close of the century, all the Bantu of the Union will all be able to read and write.

The Bantu languages used in education in the Union are Xhosa, Zulu, South Sotho, North Sotho, Tswana, Tsonga and Venda. The Bantu journalist should, among other qualifications, possess a sound knowledge not only of the official languages of the Union (Afrikaans and English) but also of at least a few of the various Bantu tongues to enable him to converse freely with people in his search for news.



Mr. Welcome D. Sali, the foreman at a Bantu-owned and financed printing works in Pretoria, received five years of training as a setter and compositor at the Priory, in Johannesburg. The increased literacy among Bantu has created a demand for skilled workers like Mr. Sali.

"RANDOPOLIS"—VISION OF AN AMERICAN

SOUTHERN TRANSVAAL is seen as a future "Randopolis"—the economic, technical and industrial capital of two-thirds of Africa—by an American professor, according to the Mayor of Johannesburg, Mr. I. Maltz. The professor foresees Johannesburg and the Rand developing with great speed until the region becomes comparable to the great cities of the world: New York and Buenos Aires for North and South America, and London and Paris for Britain and Europe. Mr. Maltz said that this prediction by Prof. Maurice Rotival, famous American regional planner, could only come true if South Africa made proper use of its main water supply, the Vaal River. "If water of the Vaal River is not used to the greatest advantage, this visionary glimpse of a Randopolis of the future will remain a day dream."

Synthetic Diamonds Made in Union

(Continued from Page 1)

Mr. Oppenheimer said that research work to find new and extended uses for diamond grit as an abrasive was stimulated by the General Electric Company's discovery and by the increased productive capacity installed recently by the Beceka company at their mine. This new discovery will further encourage research work. He believes that the effect will ultimately be a greatly expanded market in which both the natural and the synthetic product will find their place.

The team responsible for the discovery of the process was led by Dr. J. H. Custers. Other members were Dr. H. B. Dyer, Dr. B. W. Senior and Dr. P. T. Wedepohl, assisted by a staff of ten technicians. The South African discovery of a method of manufacturing synthetic industrial diamonds is the climax of a program initiated in 1955.

CONTINUOUS PRODUCTION

The Adamant Laboratory was established in 1956 adjacent to the Diamond Research Laboratory in Johannesburg, which has been conducting research on various aspects of the diamond since 1947. "I was asked to assemble a special team of scientists who would concentrate intensely on the subject of diamond synthesis," Dr. Custers said. The first step in a long series of experiments was the construction of a pressure chamber which could withstand pressure and temperatures at the high levels necessary for diamond synthesis.

The first synthetic diamond produced in South Africa, in September of last year, measured 0.4 millimetre by 0.25 millimetre. It was made up of six equal-sized particles closely bonded together. On September 16 of this year, continuous production of synthetic diamonds was begun.

"3 M" OPENS FACTORY

ONE OF AMERICA'S big industrial companies—the Minnesota Mining and Manufacturing Company—has opened a factory in Johannesburg. The present investment is £250,000 and further expansion is indicated. This is the company's first plant in Africa. A vice-president, Mr. M. H. Patterson, gave as reasons for his company's going to the Union: "We liked your sound economy and currency, and felt there were many of the factors here that led to the explosive industrial growth of both Australia and Canada, where we have had plants for some years."

"American businessmen have quite a liking for countries which minimize the gamble on investments. It is for this reason that South Africa can look forward to more and more American capital coming in," Mr. Patterson added. The Union company is a wholly owned subsidiary of the American organization. The concern, known as "3 M," is among the hundred largest industrial companies in the United States.

ENCOURAGES LOCAL CAR ASSEMBLY

OVERSEAS CAR MANUFACTURERS are interested in making cars in South Africa, and many already have assembly plants in the country, Dr. N. Diederichs, Minister of Economic Affairs, said at a dinner of the Steel and Engineering Industries Federation in Johannesburg. Following an announcement that the Board of Trade was investigating how best to encourage local manufacturers, a number of overseas firms have made enquiries about establishing factories in the Union. This is a field which undoubtedly offers great scope for the development of the engineering industry.

Dr. Diederichs said the Union's imports include many products of the engineering industry which can be produced economically in South Africa. He added that most of the minerals required by the metal industries are abundantly and cheaply available in the Union. In addition, it is blessed with cheap coal and electric power.

With a capital investment of £120,000,000, the steel and engineering industries provide direct employment for more than 170,000 people and produce goods valued at £350,000,000 per annum, or nearly 25 per cent of the total production of private secondary industry. Despite the progress made, however, only approximately half of the country's existing requirements in engineering products are supplied by local manufacturers.

40 MILLION SHEEP

SOUTH AFRICA'S SHEEP POPULATION is approaching 40,000,000, according to the latest Bureau of Census figures published in the Wool Board's magazine, *Die Wolboer*. According to the magazine, the sheep population in 1957 was 38,340,000. The trend of a return to wool sheep at the expense of mutton breeds is continuing.

Dr. Dönges Surveys Year's Finances

THE MINISTER OF FINANCE, Dr. T. E. Dönges, opening the National Party's congress in the Cape, said that in the economic field there have been four outstanding features during the past year.

The first was that the cost of living index had remained practically stationary from September last year to September this year. During that period the index had risen by only one-half per cent. Compared with December last year there was practically no change.

The second was the spectacular rise in the gold reserves, from £75,500,000 in May 1958 to £145,000,000 in October this year. The increase had come about in spite of the repayment of substantial short term loans and a gold payment of £4,500,000 to the International Monetary Fund.

IN THE BLACK

A third feature had been the confidence, in the Union and overseas, in the soundness and stability of South Africa's currency. The flotation of a long term loan in July realized more than £10,000,000 of new money. Overseas, the Union had been offered credits in larger amounts by more banks at rates which compare favourably with current rates for comparable credits. New countries have also shown interest to be associated with South Africa. This proves that sound policy means sound money.

Another feature which was gratifying, was that for the first nine months of the year exports exceeded those for the corresponding period of last year by more than £17,000,000. Over the same period imports were reduced by more than £2,000,000. The relative position is therefore over £19,000,000 better than last year. "Our current balance of payments account for this year is definitely in the black. These facts and figures inspire confidence in South Africa and show that she is poised for another advance in economic activity. The one condition is the maintenance of sound monetary and fiscal policies," Dr. Dönges said.

Stock Exchange Men Visit Mining Houses

THE PRESIDENT of the American Stock Exchange, Mr. E. T. McCormick, recently visited South Africa. When he left on November 17th, he said he was confident that it would not be long before South African mining shares are listed on the American exchange.

With Mr. Martin Keena, the Vice-President of the American Stock Exchange, Mr. McCormick, has been visiting executives of the main South African mining houses. "There has been a tremendous increase in the interest in gold shares in the United States and this can be stimulated if Americans can buy shares on an exchange," said Mr. McCormick.



Mr. Wentzel C. du Plessis, Ambassador of the Union of South Africa (right), presenting replicas of the Cullinan diamond on behalf of De Beers Consolidated Mines, Ltd., to the Smithsonian Institution in Washington, D. C. Dr. Leonard Carmichael, secretary of the Smithsonian (left), accepted the gift for the Museum. The set includes a model of the Cullinan in the rough (held by Mr. Du Plessis), the largest diamond ever discovered, the three pieces into which it was cleaved, and the nine principal gems produced from it.

Mr. Engelhard Reports Progress

MR. CHARLES W. ENGELHARD, Chairman of the American-South African Investment Company, told a news conference in New York recently that the net assets of the American-South African Investment Company, Ltd., based on the latest market quotations, were equivalent to \$43,922,000. This was an increase of 42 per cent on the company's assets since it was started thirteen months before.



Most of the company's assets are in gold mining. In answer to questions from reporters, Mr. Engelhard said that the news reports and other stories about racial troubles in Africa are "magnified and out of proportion" and will not be harmful to investments. The South African Government is strong and its economic policies are sound. He has never heard of it failing to make good a promise. The country's labour force is increasing.

Mr. Engelhard said that his company had not bought gold shares on the speculation that the price would go up. "Of course, eventually it will," he said. "These mines of ours are new for the most part, have a long life and are sound investments even at the present price of gold."

Cullinan Copy in Smithsonian

A SET OF REPLICAS of the world's largest gem diamond, the Cullinan, was added to the 52,000,000 exhibits of the Smithsonian Institution in Washington, D. C., last month.

The Cullinan diamond was discovered in the Transvaal near Pretoria some fifty years ago. The three largest of the nine principal stones cut from the original today form part of the British Crown Jewels, while the rest are in the personal diamond collection of the British Monarch.

In its original state, the Cullinan diamond weighed 3,106 carats. The Transvaal Government which presented the stone to the British Monarchy insured the gem for \$12,250,000 on its journey to England.

The Cullinan replicas, depicting the original rough stone and the three rough pieces into which it was cleaved as well as the nine principal gems produced from it, will be housed in the fabulous gem room of the Smithsonian along with other world-famous precious stones.

In presenting the replicas, the South African Ambassador to the United States, Mr. Wentzel C. du Plessis, described how the discovery of diamonds about a century ago changed the course of history in South Africa. "We are therefore all the more happy that the greatest diamond of all, even though in replica but representing as it does such a colourful era in our history, should find a place here in America, in the Smithsonian Institution, which must be acknowledged to be the most monumental repository ever devised by man to preserve his knowledge, his skill and his art," the Ambassador said.

U. S. BANKS OPEN IN CAPE TOWN

THE FIRST NATIONAL CITY BANK recently opened its second branch in South Africa, in Cape Town. Situated at the Broadway Industries Center on the city's newly-developed Foreshore, the new branch follows the establishment last year of First National City in Johannesburg. The Chase Manhattan Bank will open its second branch, also in Cape Town, early next year.

GM Will Sell Holdens

AUSTRALIA'S BEST-SELLER CAR, the Holden, will be sold on the South African market soon, said Mr. Earl Daum, regional group executive of General Motors Overseas Operations. Mr. Daum, who was on a business visit to South Africa, said in Johannesburg that the Holden will be imported in completely knocked-down form for assembly at Port Elizabeth and will be sold in open competition with the British Vauxhall and the German Opel, two other General Motors sponsored cars.

Forging Ahead in Nuclear Field

NUCLEAR RESEARCH in South Africa is rapidly taking on new dimensions under the Atomic Energy Board's five-year program for expanding nuclear research. The country's first nuclear reactor center is to be established in the Transvaal, and active steps are being taken to start a nuclear research station in the Western Cape.

At least six large companies specializing in nuclear products have been competing for the order of the research reactor to be placed in the Transvaal station, and three American executives have flown to Johannesburg to investigate the project.

The Atomic Energy Board's program encompasses research into the extraction and processing of uranium and other essential materials, and the broadening of knowledge of the use of isotopes and radiation in medicine, agriculture, and industry.

AIMS OF PROGRAM

Dr. A. J. A. Roux, the director of the Atomic Energy Board's research and development program, outlined the scope of the project at the November monthly meeting of the South African Institute of Mechanical Engineers.

Dr. Roux said that, apart from the fundamental research which will form an essential part of the proposed investigations, serious efforts will be made to stimulate fundamental research in the country in those sciences which are basic to developments in the field of atomic energy. The objects of the South African development program, he said, are: to ensure that the country derives maximum benefit from the fact that it is one of the three largest producers of uranium in the free world, to enable the country to make a contribution to the vast and important field of atomic research and development, and to assist the young and vigorous South African industry gradually but systematically to orient itself to the new technology which is associated with atomic power.

THORIUM

Uranium which is at the moment the most important material and also a prescribed material with thorium, has come to play a most important role in the economy of the Union. In 1958, South Africa exported uranium to the value of about £53,000,000. The supply position of uranium has improved vastly and the future demand is a subject of much speculation. The world's civil requirements by 1970 have been put by several authorities at between 40,000 and 100,000 tons of uranium oxide per annum. There are indications that the supply may exceed the demand.

The use of thorium in reactors could further affect the uranium market. It is necessary to improve the methods of mining and extracting uranium to strengthen the Union's position in a competitive market.

"It would therefore seem wise for South Africa to consolidate its position for the immediate future when the uranium market

FARMER FIGHTS LEOPARD

MR. DANIEL NEL, a 37-year-old farmer of Uitkyk, a farm in North Transvaal, has emerged from a bare-handed fight with a leopard—which the leopard lost.

Mr. Nel and some companions were tracking the leopard which had killed about twenty-five sheep in the previous month.

The leopard leapt at him and knocked him flat, sending his pistol flying. Mr. Nel freed himself from its claws, but before he could get up it sprang on him again. He managed to free himself again, leapt on to the leopard's back and grabbed its throat. He tried to throttle the animal but could not keep his hold on its throat.

He eventually threw the leopard to the ground where it lay down for a few moments as if paralyzed. This short time gave him time to snatch his pistol and fire the shot that killed the animal. Mr. Nel suffered deep claw gashes on his arms.

is likely to become more competitive and to prepare itself for the more distant future when the demand for uranium is bound to rise and many countries are likely to buy uranium in whatever form they can procure it," Dr. Roux said.

HEAVY WATER

Thorium is the only known alternative source of nuclear fuel; and South Africa, as probably the greatest producer of thorium, must prepare itself for the time when the demand for thorium arises.

South Africa also has an interest in the production of heavy water. It has two very important conditions in its favour in the economic production of heavy water; these are the availability of cheap power and, at SASOL, the largest single source of synthetic hydrogen in the world. It is the Board's intention to keep this field under review until such time as the heavy water picture becomes clearer.



South Africans, like Americans, enjoy sending and receiving Christmas greeting cards. We of SOUTH AFRICAN SCOPE cannot send each one of you, our readers, a Christmas card personally. But our wish for each of you, at this joyous season, is as warm and sincere as the holiday merits: a merry Christmas! And a happy New Year, too!

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Moya Meaker, Miss South Africa 1959.

BEAUTIES AS AMBASSADORS

MISS WORLD last year was Penelope Coelen, a 19-year-old secretary from Durban. She walked away with the Miss South Africa title and went on to be chosen Miss World in London. This year's winner of the Miss South Africa contest was Moya Meaker, also 19 years old. Miss Meaker, who ran Miss Netherlands a close race for the Miss World title in London in November, is a nurse at the Groote Schuur Hospital in Cape Town.

Miss Coelen arrived in New York on November 3rd for her second visit to the United States since her election last year as Miss World.

P. R. GIRL VISITS ROCK LOBSTER COUNTRY

A NEW YORK PUBLIC RELATIONS specialist, Miss Ruth Lundgren, flew into South Africa during the fall to find out some things about the country from which the fabulous rock lobster tails come. Miss Lundgren wants to tell the American housewife more about the origin of these culinary delights, which have attracted such widespread interest and acclaim in the United States during the past decade. Once an item for gourmets only, the South African rock lobster has developed into an \$11,000,000 export business. Miss Lundgren's visit was sponsored by the South African Rock Lobster Association.

Korean Veteran Is New Attache

THE NEW DEFENCE ATTACHE of the South African Embassy in Washington, Col. S. van Breda Theron, assumes his post this month. He is succeeding Col. G. C. Krummeck, D.S.O., who is returning to South Africa. Colonel Theron comes to the United States from the S. A. Air Force Flying School at Dunottar, where he was the commanding officer.

During the Korean conflict, he was the first officer commanding the South African "Flying Cheetah" Squadron and was awarded a place in the "Hall of Fame" of the 18th Fighter Bomber Wing of the U.S. Air Force, under whose command the famed "Cheetah" Squadron fought in Korea.

Commissioned in 1938, Colonel Theron flew with the First Squadron in Abyssinia and later commanded an R.A.F. Fighter Squadron in Tunis and Italy, where he was wounded. He has completed three combat tours and holds the British D.S.O., D.F.C. and A.F.C., as well as various medals.



Colonel and Mrs. Theron and their two daughters outside their Pretoria home.

Americans Lecture at Fort Hare

PROFESSOR R. F. HAUGH, a visiting lecturer from the University of Michigan, recently gave lectures on "Ernest Hemingway" and "After the Last Generation: A Study of Modern American Literature" at the Bantu University College of Fort Hare. Professor Haugh's visit to South Africa is sponsored by the U.S. Department of State. Another American visitor, the Rev. Dr. McLeod Bryan, visiting Fort Hare under the United States-South Africa Leader Exchange Program, spoke on "Christian Social Ethics" at the university college.

Durban Conference: Youth and Science

THE UNION'S Golden Jubilee year of 1960 is also the fiftieth anniversary of the University of Natal, which plans to celebrate the occasion with a National Conference on Education in Durban next July. The general theme of the conference will be: "Are we preparing our youth for this new age of science and technology intellectually, emotionally and morally?" A comprehensive program of lectures and seminars will bring teachers into personal contact with scientists and thinkers who are working at the frontiers of the expanding scientific and spiritual horizons.

AMERICAN VISITORS

A number of eminent men in the fields of education and science have accepted the University's invitation to participate in the conference. These include DR. C. W. DE KIEWIET, South African-born President of the University of Rochester (N. Y.); DR. L. A. DU BRIDGE, President of the California Institute of Technology; SIR VIVIAN FUCHS, Polar explorer and scientist at Cambridge University; SIR EDMUND HILLARY, hero of Mount Everest and the Antarctic; SIR JULIAN HUXLEY, eminent biologist and former Director-General of UNESCO; DR. ROBERT OPPENHEIMER, atomic scientist and director of the Institute for Advanced Study at Princeton University; DR. BASIL SCHONLAND, well-known South African scientist and director of the Atomic Energy Research Establishment at Harwell, England; and DR. CARLETON WASHBURNE, well-known American educator.

A fee of five guineas (\$15.00) will entitle participants to attendance at all sessions during the twelve-day conference. All correspondence regarding the conference should be directed to: Organising Secretary, National Education Conference, P.O. Box 375, Pietermaritzburg, Natal, South Africa.

NEW FILM CATALOGUE

THE INFORMATION SERVICE has just issued a new catalogue of 16mm. sound films available for showing in the United States. The twenty-six films listed—the majority in colour—cover all aspects of life in South Africa: its history, its culture, its social, economic and political growth. Requests for this catalogue should be addressed to: Film Section, Information Service of South Africa, 655 Madison Avenue, New York 21, N. Y.

Safety Slogan

A SAFETY SLOGAN in the South African campaign to decrease traffic casualties is: "To avoid that run-down feeling—cross carefully."



At the exhibit of contemporary South African architecture, recently held in Washington, Mr. W. Desmond Willson (right), Cultural Attaché at the South African Embassy, toured the displays of architecture and crafts with Mr. Malcolm Burrows, Assistant Director of the National Housing Center.

Capital Sees S. A. Architecture

FOR THE FIRST TIME in the United States, an illustrated review of the more important South African buildings in governmental, educational, religious, commercial, industrial and residential categories could be seen at the National Housing Center in Washington, D. C. Current trends in South African architecture were dramatically pictured in the exhibit, which ran from November 25th through December 8th.

The main bulk of illustration reflected the contemporary scene. A map of the Union was accompanied by views of the distinctive geography and colourful character of regions such as the Paarl Valley, the Outeniqua Pass, the Tzitzikama Forest, the Karoo and the desert canyons of the Orange River.

FLOWERS BY AIR

Development of architecture was traced from kraals in Pondoland, through the "cast iron" period, the Raadsaal structure in Pretoria, and the new towns like Vanderbijlpark and Sasolburg.

The exhibit was presented by the National Housing Center, Washington, in cooperation with the South African Information Service in Pretoria. Added to the architectural display were home furnishings and native crafts belonging to the South African Embassy in Washington. South African wildflowers, including proteas, were especially flown from the Union for this exhibit.

FESTIVAL FACTS

A MILLION VISITORS are expected to attend the Union Festival Celebrations at Bloemfontein between March and May next year. Two thousand sportsmen will take part. In the final week of the celebrations, about fifty thousand children and adults will appear in the Free State Stadium. On the morning of May 31, about 15,000 people will be seen in the procession "South Africa Marches Past." Massed choirs of school children and students from all Provinces and South West Africa will also take part in the final celebrations.

PLANETARIUM

EIGHTY TONS of concrete, heavily reinforced with four and a half tons of steel, lie behind the luminous, star-studded sky which Johannesburg will see in its festival planetarium next year. "This material is contained in the biggest hemispherical dome yet built in this country," said the architect of the building. A team of technicians arrives in Johannesburg from Germany this month to open the eighty packing cases of equipment stored at the Witwatersrand University and to install the complicated machinery. Above the concrete dome is an outer roof of five tons of copper; the inside ceiling is the aluminum lining on which the skies will be projected. The inner circumference of the dome is 200 feet, and the architect is planning an enormous "skyscape" of Johannesburg as a frieze. The auditorium has room for 432 chairs which will be tilted back so the audience can study the stars in comfort.

Trans-World in Trucks

SEVENTY THOUSAND MILES through fifty-four countries on five continents — this is the goal of three South Africans and three Englishmen who are setting out on the Anglo-African First Trans-World Safari. Mr. Derek Linton of Durban, leader of the group, arrived in New York recently to supervise preparations for the journey, which is to be made in two one-and-a-half ton Willys trucks, specially equipped to travel over deserts, swamps and rough terrain. The men will make tape recordings for a leading American radio network and have also agreed to supply photographs and films of their adventures to newspapers, magazines and TV companies in the United States and Britain.

GOLF BALL KING IN S. A.

"SOUTH AFRICA is Golf country. . . . The folks here play more golf than any other nation, and as for their standard of play, I give professionals and amateurs top marks." The man who sang these praises knows what he is talking about. He is Dick Penfold, the "Golf Ball King" of England, whose factory produces 5,000,000 golf balls a year and exports them to every country in the world, except Russia. Mr. Penfold, who made a five-week trip to Southern Africa during the fall, disclosed that about 240,000 of his golf balls are exported to South Africa each year.



Don Shepherd concentrates on up-hill running as he works out in his favorite pair of "tackies" (sneakers).

Miner to Cross U.S. on Foot

A GOLD MINER and long distance runner from Johannesburg, Don Shepherd, will try to walk the 3,000 miles from New York to Los Angeles in seventy days. Mr. Shepherd beat the 30-year-old record for the run from Land's End, England, to John O'Groats, Scotland, on October 24th when he covered the distance of 876 miles in a little over twenty days. He cut nearly ten days off the previous record.

The miner warmed up for his journey abroad by running the 903 miles between Johannesburg and Cape Town last year in twenty-three days. On this trip, he discovered that he could reduce the jarring of running down steep mountain passes by running backwards.

PRACTICES YOGA

Mr. Shepherd, who is 43, hopes to make the run from New York to Los Angeles in seventy days, cutting seven days off the record of Edward Weston, who walked the distance in 1910 when he was 71 years old. (Improvements in highways have reduced the distance by about 583 miles since that date.)

A non-smoker and non-drinker, Mr. Shepherd practices yoga to help slow down his thoughts. He runs "for the honor of amateur sport" and for his club, the Germiston Callies Harriers.

REGISTRATION

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An aerial view of the Cape Peninsula and Cape Town, spreading out around Table Mountain.

Cape Town and Madrid: "Cheapest" Cities

SOUTH AFRICA is one of the least expensive places in the world to live in, according to a survey carried out by a London financial journal. The paper listed twenty-six of the world's major cities in order of expense, according to what a visitor would expect to pay for a single night's accommodation. Cape Town is placed 25th.

A rough guide has been worked out covering the cost to the visitor of dinner, bed and breakfast at a four-star hotel, a package of twenty cigarettes, a gallon of gasoline, a food basket of one pound of butter, two pounds of bread, five pounds of potatoes, one pound of fillet steak and a bottle of wine, a wardrobe containing a suit, a pair of shoes and a drip-dry shirt, and the rent for a two-room furnished apartment.

Top of the list is Caracas, Venezuela, where the price of dinner, bed and breakfast alone is £10 (\$28.00). In Caracas, eating out and buying one's food are both equally expensive.

At the other end of the scale, in both Cape Town and Madrid, one can sleep, eat and shop at a modest rate.

Second on the list of expensive cities is New York, where the cost of dinner, bed and breakfast is £9 (\$25.20), and the annual rent of a small furnished apartment is £1,100 (\$3,080), according to the journal.

London is half-way down the list with a £4.10s (\$12.60) dinner, bed and breakfast and £700 (\$1,960) annual rent.

Cape Town offers a £3 (\$8.40) dinner, bed and breakfast and an annual rent of £300 (\$840).

FIND-IT-YOURSELF

A DO-IT-YOURSELF fan, Mr. Billy O'Keefe of Kimberley, recently decided to lay a cement drive in his garden and found a three-and-one-half carat diamond.

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